Medical Library

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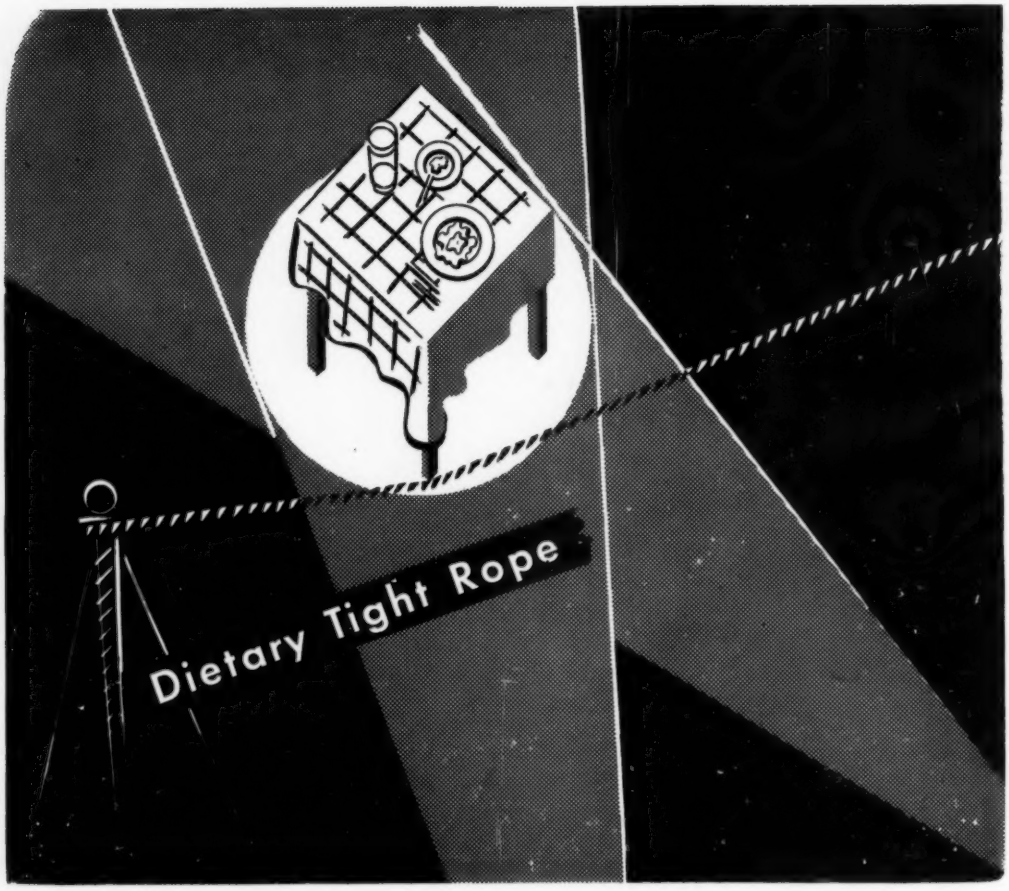

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Medicine After The War

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Numberless uncertainties face the world of tomorrow and the people of America. Everyone in medicine shares these doubts with men and women in all fields of human endeavor. In addition, there are grave problems peculiar to medicine, of special concern to those engaged in medical research, education, and practice. Challenging responsibilities confront medicine, which must be met with resolution and wisdom if medicine is to maintain and strengthen its position in a new and better world after the war.

But, if there are baffling unknowns, let us be equally sure that vastly important *certainties* also lie ahead, certainties that medicine has learned even through the war years, and that provide a sturdy framework about which we may construct the edifice of medicine in the world of tomorrow. The first of these certainties is that medical research will play an increasingly important role, not merely in the laboratory, but in medical education and the practice of medicine as well.

Wartime and Postwar Medical Research

It would be fruitless to recount the practical consequences of medical investigation on our better understanding of man in health and disease and on our ability to control disease. Life has been prolonged and enriched and shorn of much of its ignorance, fear and pain. It is anomylous that even so destructive a catastrophe as the present war has incidentally contributed to these ends.

During the war we have learned that attacks upon unsolved problems are much more effective when teams of investigators from several laboratories work in collaboration. Wartime experience with plasma has tremendously stimulated the organization of blood banks for civilian use, not only for occasional peacetime catastrophes, but in the routine of hospital care. Even the rural physician can be supplied.[1] Blood banks are supplying blood and plasma not only for substitution therapy in shock, hemorrhage and related conditions but are increasingly serving as centers for the collection and distribution of specific immune plasmas and serums for the therapy of infectious diseases. [2, 3] The more effective use of penicillin has resulted from a coordinated research program dictated by war needs and directed by Dr. Chester Keefer. Assisted by the War Production Board, drug houses are now producing much more penicillin in a month than was manufactured in the entire year 1943. We have learned that health is not a local commodity but must, like peace, be maintained on a global scale or all will suffer. The importance of wartime accelerated air transport in health problems is dramatically stressed in a passage of the 1944 annual report of the Rockefeller Foundation.

"In former issues of this Review an account has been given of the successful campaign in Brazil against the dangerous malaria-carrying Anopheles gambiae mosquito whose home is in Africa. After high death rates and enormous suffering, and with great labor and cost, it can be said with confidence that the gambiae species was eliminated from Brazil.

"The Foundation was therefore disturbed to receive, during 1943, advices from its representatives in Rio de Janeiro that gambiae mosquitoes, some of them alive, had been found on planes coming from Accra and Dakar in Africa to Natal. Even more disturbing was the news that five live gambiae had been discovered in dwellings near the Natal airport. Incoming planes from Africa are, of course, fumigated both before they leave Africa and before they land in Brazil, but a few mosquitoes were evidently able to stow away safely in the modern, complicated airplanes. When it is realized that a single fertilized gambiae could start a conflagration similar to that which swept north from Natal in the thirties, the danger of the situation becomes apparent.

"Thanks to the efforts of the Brazilian and United States authorities, the immediate situation is now in hand. But it poses a problem of larger

*Founders day address delivered at the Medical College of the State of South Carolina, Charleston, S. C., Nov. 2, 1944.

significance which cannot be evaded. Around the ports of Africa and deep within the hinterland lie the breeding centers of the gambiae. The safety of the Western Hemisphere, which is now within a few hours' flight across a narrow ocean, can no longer be left to the uncertainties of a flit-gun campaign. Modern airplane travel has made old methods and ideas of quarantine completely obsolete."

Much of what has had to be learned about aviation medicine will increase the safety and comfort of postwar flying. Air transport of the wounded has been a major factor in the astonishing reduction in the death rate of battle casualties. We may anticipate that, after the war, the airplane and other means of improved rapid transportation will contribute significantly to problems of distributing medical care. Increasingly, patients will be carried to the physician and the hospital conserving the energies and time of the doctor, and obviating a prodigal construction of hospitals and other health facilities.

The war has also taught us that we must be willing to pay without reservation when there is a "must" job to be done. The construction of guns and the mills to make the steel, of supplies and the factories to produce them, and of ships and shipyards—for these we have freely given of our treasure. We must be equally ready to provide funds for the creative tasks to be accomplished in man's never-ending war against death and disease. That war has never commanded a fraction of the boldness of our expenditures and efforts in destroying our human enemies.

In Detroit there is a vast assembly line turning out a Liberator bomber, bigger than a Flying Fortress, every hour, at a cost of about a third of a million dollars. A day's work in a single factory equals the warplanes shot down in one major raid. It would also pay a year's tuition for practically every medical student in all our medical schools. It would balance the annual budget in a score of medical schools. It would more than support all the cancer research in this country for years. One or two Liberator bombers shot down from the many thousands of planes that participated in the Normandy invasion is all we care to pay annually for cancer research; yet the daily death rate from cancer (400) greatly exceeds the daily deaths (300) in the first days of the Normandy invasion.

One bomber equals months of cancer research, a year's legislative appropriation for a state medical school, or the gate receipts of one major football game. The war shames our timid support of research in our fight against disease, which continues to exact its appalling toll of unhappiness, suffering and death, year by year, in war and peace. We may be sure, we must *make* sure, that research will vastly expand after the war, so that there may be an insulin, a liver extract, or a penicillin for hypertension, coronary disease, and the common cold. Science, said Julian Huxley, will continue to be the chief agency of man's control over his own destiny.[4]

But research, the scientific method, is more than a technique for controlling nature. It is a frame of mind, an approach to the problems of life, a design for education. In the Herbert Spencer Memorial Lecture at the University of Oxford in 1942, Professor A. G. Tansley insisted that "scientific culture . . . must take its place on equal terms beside literary and artistic culture."[5] If a knowledge of political history is essential to education, so also is a familiarity with the broad sweep of history written in the rocks of geology. The economics of nations and classes are no more basic than the interdependent plant and animal relationships in the "web of life" emphasized in ecology. Faraday's brilliant but simple reports on his studies of electricity, and Harvey's accounts of his experiments on the circulation, are no less exciting culturally than are the classics of English literature and poetry. Too many people, including teachers, regard science as little more than weighing and measuring, test tubes and galvanometers. Science is easily made dull and uninspiring. It can be a liberal education, at all levels: the high school, the university, the medical school.

MEDICAL EDUCATION

Among the postwar certainties we may count on, is that medical education will become increasingly important as the foundation upon which medicine and the nation's health rest. The original call of the Medical Society of the State of New York, which led to the formation of the American Medical Association in 1847 stated that "it is believed that a national convention would be conducive to the elevation of the standard of medical education in the United States," and "there is no mode of accomplishing so desirable an object without concert of action on the part of the medical societies, colleges and institutions of all the states."

In 1905, Dr. Arthur Dean Bevan reported to the first annual conference of the Council on Medical Education of the American Medical Association: "Your committee finds . . . . that the American Medical Association was founded for the purpose of elevating . . . . medical education in the United States. Your committee believes that this is still the most important function of the American Medical Association. . . . . With the new reorganization of the Association into a compact . . . . body, representing the medical profession of each county and state, your committee feels that the American Medical Association has become the best national instrument to . . . . elevate medical education."

The close interdependence of medical education, medical care, and medical research is asserted much more frequently than it is understood. Medical education has no meaning except as it conceives and meets problems of medical care, not simply in the control of illness in a given patient, but in fostering an understanding of health as a public asset, and of disease as a foe to be met not only in the

patient but in research in the clinic and the laboratory.

There are very naive concepts regarding the role of research in schools of medicine. Trustees say, "Our funds are so limited that they must be employed for teaching; we cannot support research." Presidents say, "Our aim is to produce practicing physicians; we leave research to the Rockefeller Institute, Harvard, the Mayo Clinic." Instructors say, "Teaching occupies my full time and energies. I am employed to teach. I have neither funds, facilities, nor time for research."

In medical education good teaching cannot be divorced from research. Medicine is a complex of experimental sciences and arts, and it cannot be understood unless research is also understood. The student who goes entirely through his medical course learning all the material placed at his disposal, without becoming especially interested in one of the many unknowns he encounters in his studies, has missed something fundamental in his education and vital to his later practice of medicine. The teacher who teaches what is known, however excellently, is remiss as a teacher unless he arouses an impelling curiosity in his students regarding the unknown. This he can scarcely do unless he himself has been sufficiently stimulated to attempt to solve some problem at which he has at least worked earnestly during some of the time remaining after the responsibilities of classroom, laboratory and clinic instruction have been met. I do not mean that all medical schools should try to develop ambitious and elaborate research programs. That is impossible even with normal peacetime resources of funds and men. I do mean that the school which considers research and teaching as separate activities, and the teacher who is not inwardly driven to do even a modest amount of research, will only partially accomplish their goals of teaching medicine. With most of our institutions and most of our teachers and most of our students, by far the greater emphasis and effort must necessarily be upon mastering the known in medicine. But there must be a leavening of research to convert the dough into bread.

A well-balanced medical school program if it but carries only the flavor of research, will produce men better qualified to meet the complex problems of medical practice, and better attuned to the progress which will continue to be made in the understanding and control of disease by men who devote most if not all their energies to unsolved problems in biology and medicine.

As unjustifiable as the artificial separation of the medical school professor's duties into those of teaching and research, is the equally indefensible separation of the subject matter of medicine into the obsolete watertight compartments known as departments. Our philosophy of medical education states that man's body, in health and disease, may be divided into its anatomy, its biochemistry, its physiology, its pathology, and so forth. This highly artificial subdivision of our subject matter was not planned. It was an accident—an accident of growth. At first there was little more than Anatomy in the curriculum. Anatomy gave birth to daughter sciences including Physiology, which in turn produced the offspring, Physiological Chemistry, and later still another lusty infant, Biophysics. Departments just grew, and the departmental system of instruction just happened. There has resulted a scramble for student time, in which every hour of student time not specifically accounted for in the curriculum is counted as fair game. The department with the most aggressive hunters captures these hours. The successful department is that which has acquired the most hours into which it then crams a maximum of detail whether or not it is relevant.

A more rational and time-conserving program of study is one in which there are no Anatomy, Physiology or Pathology "courses" at all. Instead, the Anatomist, the Physiologist and the Pathologist collaborate in presenting an integrated picture of the body in health and disease, in which accidental repetition is eliminated, and planned repetition incorporated when required. I have participated in such a plan at another level of education, the teaching of Biology to college students. The course is a collaborative enterprise in which lectures, discussions and laboratory exercises are given by twenty men from ten different departments, including medicine and surgery. The departmental affiliation and special interests of each instructor are subordinate to the subject-matter of the year's course—Biology. Frequent discussion and criticism of each other by participants in the course have led to a presentation of biology at this level which is far more effective than is possible without such close collaboration. The success and widespread adoption of such plans in college teaching are stimulating medical educators to think along similar lines. There would be an improved selection of the contents of the medical curriculum, since the material presented by each instructor would be subject to the scrutiny of his colleagues in other fields. The student would better grasp the total picture of medicine, since each instructor would integrate his subject with that of this colleagues in a far more effective manner than is possible under the traditional departmental course system. Student time would be conserved for reading, reflection, investigation, and the pursuit of special interests.

In the first two years of medical school, conjoint courses should be given by committees consisting of members of several basic science departments. The curriculum might be somewhat as follows:

1. First quarter (freshman year)

Introduction to Medicine. Structure and chemistry of cells, tissues, and common parasites; the reactions of tissues to foreign agents; gross anatomy of the extremities, elementary neuro-muscular physiology; reproduction, growth and senescence. Given

by a committee with representatives of each of the following departments: Anatomy, Bacteriology, Biochemistry, Pathology, Physiology, Medicine,* Surgery,* Pediatrics,* and Obstetrics.*

*In each of the basic science conjoint courses, appropriate clinical material (lectures, demonstrations, X-ray, etc.) should be included, not to make clinicians of medical students prematurely, but to assist in the student's grasp of the basic sciences. Also appropriate preclinical material should be included in the clinical work of the student.

2. Second quarter (freshman year)

The Internal Environment: Chemistry of blood and regulation of its composition; coagulation; hemorrhage; morphology, formation, abnormalities (anemias, etc.) of formed elements. Given by: Anatomy (histology), Biochemistry, Pathology, Medicine.

3. Third quarter (freshman year)

The cardiovascular, renal, and respiratory systems. The chemistry, physiology, histology, gross anatomy and abnormalities of the heart, vessels, circulation, kidneys, and respiratory system; the cardiovascular drugs. Given by Anatomy, Biochemistry, Pathology, Pharmacology, Physiology, Medicine, Surgery.

4. Fourth quarter (sophomore year)

Gastroenterology and metabolism. The histology, physiology, pharmacology, biochemistry and abnormalities of the gastrointestinal tract and metabolism (including endocrine glands). Given by Anatomy, Biochemistry, Pathology, Pharmacology, Physiology, Medicine, Surgery.

5. Fifth quarter (sophomore year)

The Nervous System. Histology, gross anatomy, physiology, pharmacology of the nervous system; medical psychology, abnormalities of the nervous system. Given by Anatomy, Medicine (psychiatry), Pharmacology, Physiology, Medicine, Surgery.

6. Sixth quarter (sophomore year)

Introduction to the clinical work including physical diagnosis, history taking and therapeutics.

Extension of these curricular concepts into the clinical years has already occurred in the modern medical school. In his clerkships, the clinical student dooes not study Medicine, Surgery or Pediatrics. He studies patients: human beings presenting abnormalities to be understood and controlled. "Preclinical" instruction lags far behind. I vividly recall the excoriation of a student—not myself—by an anatomist starred in American Men of Science—not at the University of Chicago — for reading a Biochemistry text in an Anatomy laboratory. As an instructor in the myopic basic medical sciences, I contrast this with the universally practiced interdepartmental consultation service in the clinics. The latter is not merely a more practical approach, but a more rational one as well.

Educational experimentation along these lines is progressing in a few schools—especially in schools with young faculties, not bound by the asphyxiating traditions in American medical education. We do not know what the outcome will be. The important fact remains: research and experimentation is under way in medical education.

MEDICAL CARE

Scientific experimentation must provide not only the solution of the problems of control of disease and the education of physicians but also it must guide us in determining the forms which medical practice shall take in the future. Medical science plans experiments, measures results and plans further experiments, to the end of greater and greater understading of man in health and disease. This same spirit must direct us in solving the equally complex problems of man's relationship to his fellows, and the place of medicine in a changing social and economic structure.

We may be sure that changes will come in the forms of medical practice after the war. In facing these problems, we should be impelled by the impartial spirit of inquiry which serves so well in the pursuit of the truth in the medical sciences.

We must recognize the extreme complexity of the problem. To state that doctors are attracted to cities because they can make more money there is a gross oversimplification. Cities provide the essential tools for the practice of medicine, which have been many times multiplied: X-ray equipment and electrocardiographs, laboratory facilities and consultation services, and above all, hospitals.

The economic level in many rural communities, and in many counties in the United States makes it impossible for those communities, unaided, to provide either doctors or the necessary facilities for doctors to carry on their work. But even if all facilities were provided the country physician, problems of distribution of medical care would remain. The doctor demands, in common with his civilized fellows, a life with stimulating social, intellectual and cultural contacts. Good schools, homes, churches, music and comradeship may loom as large in his selection of a community to practice in as income, X-rays or hospitals.

The distribution of medical care is only one aspect of the larger problem of elevating the general economic level of large numbers of our population in peacetime. If unemployment is kept as low as now, and production is maintained at the present level after the war, and dedicated to the welfare of the people, problems of distribution of medical care will be greatly diminished.

Difficult though these problems are, they must be attacked. Here, as in science, experimentation provides the most promising approach. New experiments are being planned almost daily, and the reports are rapidly accumulating. The California Physicians service, under the auspices of the San Francisco County Medical Society, is rapidly increasing the scope of its services. About a year ago, the rate of growth of C. P. S. was about 1000 new members per month. Today, 6000 members per

month are added, although the net gains are less than these figures indicate because of the turnover in employment.

The Prepaid Medical Service in Connecticut is operating on a cash indemnity basis under the auspices of the Connecticut State Medical Society. The Committee on Medical Economics of the Kansas Medical Society is developing a prepayment plan for certain medical services. From Michigan it is reported that "one person in nine in Michigan is covered by Michigan Medical Service Certificates, and one in five by Michigan Hospital Service."[6]

The Missouri State Medical Association has unanimously adopted a plan of prepayment for medical and surgical care in hospitals, to be known as Missouri Medical Service, Inc.

In Nebraska, the House of Delegates of the Nebraska State Medical Society has adopted a resolution providing for the study of insurance plans and organization of such a plan for Nebraska.

Numerous other plans have been in operation, for varying periods, on a state-wide or county basis, under the auspices of the medical profession. This is true in Colorado, Massachusetts, New Jersey, New York, Pennsylvania, Utah, Texas, Kansas, Delaware, and North Carolina. These plans must be looked upon as experiments in the more complete and equitable distribution of medical care.

As in the fields of the more exact sciences these experiments in medical sociology are likely, in some instances, to turn out to be poorly conceived, and often the results may be difficult to interpret. But the all-important fact remains: experiments are in progress, and we may hope that such experiments in the distribution of medical care may be as fruitful as those upon insulin and diabetes, liver and anemia, and penicillin and infections. Roger Lee, president-elect of the American Medical Association, discussing this problem before the Pepper subcommittee on Wartime Health and Education, declared that "it was hard to improve the phraseology of a British recommendation: 'There should be initiated, by arrangement and agreement between the government and the profession, organized experiments in the methods of practice, such a group practice, including health centers of different kinds, which should extend to general practitioners hospital units attached to general hospitals. Future developments in group practice should depend on the results of such clinical and administrative experimentation.' "[7]

We are impelled to continue experiments of this kind, as well as experiments in carrying patients to the doctors with their facilities, recalling the air transport of the wounded in battle, instead of struggiing to provide doctors and hospitals to every community. We must experiment with travelling clinics and the closer integration of diagnostic, hospital and expert consultation services. Above all, we must experiment rather than design blue prints in the skies; we must follow the methods of science, not the promptings of the emotions. As a Physiologist, I am a devotee of the Science of medicine and of the scientific method as the most promising instrument for the solution of man's problems and of medicine after the war, in the control of disease, the education of physicians, and the provision of adequate medical care for everyone.

BIBLIOGRAPHY

1. Wiley, A. R., Oklahoma State Med. Assoc Jour., 36:329-30, 1943.

2. Davenport, J. W., Jr., New Orleans Med. and Surg. Jour., 96:97-104, 1943.

3. Alsever, J. B., Am. J. Pub. Health, 34:165-173, 1943.

4. Quoted in Nature, 152:547, 1943.

5. Quoted in Nature, 152, 548, 1943.

6. Jour. Mich. Med. Soc., 43, 623 (July) 1944.

7. J. A. M. A., 126:244 (1944).

Treating Diabetics With Insulin

WILLIAM R. JORDAN, M.D., RICHMOND, VIRGINIA

I was asked to talk to you about the new things in diabetes and it occurred to me that insulin is tied up with nearly all the advances in diabetes since its introduction by Banting and Best.

There have been modifications in the use of the original regular insulin and modifications in the insulin itself. Different men employ somewhat different methods in using these modified insulins. Many things mentioned by me are not new, but most of them are new to me because my present knowledge is the result of new experiences with them. For example, I thought I knew how the regular insulin acted until I encountered cases of severe insulin resistance. Then I really obtained some new knowledge as far as I was concerned.

There are 4 kinds of insulin. They are regular, crystalline, protamine, and globin. They are marketed in different strengths based on the blood sugar lowering capacity of 1 cc. of the product under certain standard conditions. These concentrations are designated in terms of units so that 1 unit of one strength, such as U-80, will be equal to 1 unit of any other strength, such as U-20. To eliminate the need for figuring the volume needed to equal a certain dose, syringes are sold with scales graduated in terms of the different strengths of insulin. Unfortunately, confusion arises often because one assumes that 1 unit of insulin as marked on a syringe equals 1 unit of insulin regardless of the strength used. This, of course, is false unless the scale used is identical with the concentration of insulin used. I believe it would be better to have a standard syringe marked only in minims which is known to every doctor and could be taught easily to every patient than to continue with our present system. It would then be simple to direct the patient to take so many minims of U-40 or of U-80 insulin of a certain kind. Mistakes of this nature occur daily when a patient changes doctors or buys a new and different syringe. I have known the dose of "10 units" to actually represent 80 units, 40 units, 20 units, 10 units, 25 units, 50 units, and 8 units because of the differences in strengths of insulin and the scales used on different syringes. If you are using U-40 insulin and have directed the patient to take 23 units, she may break the syringe, buy one with a minim scale and take 23 minims or 57½ units which may produce severe insulin reactions. This happens repeatedly even in patients who have used insulin for years. At present I have in the hospital a patient, case No. 1054, who has taken excellent care of herself with insulin for 18 years, and yet she made a similar mistake.

All of us are familiar with the regular insulin which begins to act within ½ hour, tends to produce hypoglycemic reactions in 4 to 5 hours, and finally wears itself out in 7 to 8 hours. The crystalline insulin, or solution of zinc insulin crystals, is comparable in every way except that it lasts for 9 to 10 hours, and I believe it has a little less tendency to produce these sudden reactions. I have used crystalline instead of regular insulin for several years without regret. The protamine insulin is quite different. It begins to act slowly over a period of some hours and continues to exert a relatively uniform and moderate action for 24 hours or more. The smaller doses, such as 10 to 15 units, act much more rapidly and have less duration in my experience. In such small dosage this insulin seems to act more like crystalline insulin, and reactions at noon or before supper result from the breakfast dose. The larger doses, such as 100 units may last 2 or 3 days. One patient, Case No. 218, had a blood sugar of 55 mg. seventy-two hours after his previous dose of this insulin. The difficulty with this insulin is that it seldom acts strongly enough to take care of a reasonably large meal, and it acts too strongly if no food is taken. Therefore, glycosuria after meals tends to occur, as well as insulin shock in the early morning hours after 8 hours fasting. We try to compensate for the former by using some crystalline insulin and for the latter by prescribing a bedtime lunch of milk and crackers. Reactions with this insulin may simulate those due to the regular insulin, including weakness, trembling, sweating and nervousness. In addition headache and nausea on awakening may be the only manifestations of extreme hypoglycemia due to protamine insulin. Furthermore, although orange juice may give relief as with regular insulin, the maintained action of this insulin will cause a recurrence of symptoms unless a more substantial lunch is not soon taken.

Globin insulin is the newest of the commercial insulins. It represents an attempt to perfect an insulin that combines the strong quick action of the regular insulin with the prolonged effect of the protamine variety. Unfortunately, it seems to have failed in 2 respects. It begins to act too late and it stops acting too soon. The result is that certain patients, especially those with great nocturnal catabolism and little intrinsic insulin, wake up with a high fasting blood sugar. Breakfast pushes this still higher until several hours later the globin insulin

Read before the Dillon, Darlington, Florence, and Marion County Societies, Oct., 1944, Florence, S. C.

The Author:

A graduate of the University of Virginia Medical School (1928) Dr Jordan is now located in Richmond, Va., where he devotes his practice to diabetes.

given before breakfast finally gets to work and brings the blood sugar down.

I have tried this insulin in 20 odd cases and have not found it very satisfactory. It seems to produce much more pain at the site of injection than the other insulins do. One patient, Case No. 36, discontinued it for this reason after several months of trial. Another stopped it because of insulin reactions occurring without warning at any hour of the day or night until the dose was reduced to the point where the blood sugar was much too high. Apparently its action is variable and influenced by factors beyond my knowledge. I cannot say that I have given it an adequate trial, but I have failed to find evidence that it should replace any other insulin. Mosenthal considers that it acts about 12 to 14 hours and can be used in conjunction with another insulin. If that be true, it should be satisfactory for injection before breakfast and supper without the help of another insulin. I have not found this true.

Now to proceed from the principles to the details of insulin treatment, let's outline our method of regulating a diabetic patient. The foundation of treatment is a uniform daily diet prescribed to control body weight and general health. Three regular meals of approximately equal size are given. Give balanced meals rather than calories, carbohydrate, protein and fat. No one wants to eat a calorie. He wants a good square meal, and he is entitled to it. If he needs more bread, he wants more butter or meat to go with it. Just remember what we all eat and give the patient that kind of a diet without the sweets we consume. Weigh the patient at each visit and increase or decrease his food as we find necessary each month or two. In addition to the 3 meals, milk and crackers are given at bedtime if protamine insulin is used, and fruit is given 3 hours after breakfast if crystalline insulin is needed. If the patient is treated at the office or home, one may wait a week or two, if there is no emergency, to see if the sugar is controlled by diet alone. If control is not thus obtained, office or home cases are then started on insulin which they are taught to give themselves. Changes in the insulin dose are made on the basis of tests of the 24 hour urine sample which the patient is instructed to bring at each visit about 3 days apart. In hospital cases insulin is begun the first day, at which time a dose of 12 to 15 units of protamine insulin is injected as soon as the diagnosis of uncontrolled diabetes is made. The following morning, if no insulin reaction has occurred, the dose is increased 3 units and this is done daily, as long as the daily 24 hour urine specimen shows too much sugar and no reactions occur, until the dose has reached 30 units. Now, if more insulin is needed, 6 units of crystalline insulin is given as a separate injection immediately before the protamine is injected, both always being given before breakfast. Thereafter both insulins are increased by about 2 units daily for several days according to the 24 hour urine tests and blood sugar determinations made before breakfast to help regulate the protamine dose and before lunch for the crystalline dose. Any further increase is made so as to keep the ratio of protamine to crystalline insulin about 3½ to 1, or say 50 units of protamine to 14 units of crystalline. Once the sugar is controlled, the insulin should be reduced by a few units, usually by visits to the office, on the basis of tests of samples of the 24 hours urine which the patient saves at home the day before his visit. I usually see the patient every 3 days and reduce the does about 3 to 4 units whenever the test is sugar free or an insulin reaction occurs, keeping the ratio about 3½ to 1 and bearing in mind that most patients needing only 30 units of insulin can be controlled with protamine alone.

Various conditions affect the insulin need. Infection and acidosis are two. Another is pregnancy. Dr. Priscilla White at the Joslin clinic has had a wide experience in this field. One interesting feature of her work concerns the influence of the hormones, chorionic gonadotropin and pregnanediol, on the fetal mortality. With control of these hormones she has lowered the fetal mortality rate from 40% to 10% which is comparable to that in the non-diabetic. At present we are checking this enviable record by similar tests on our cases. The gonadotropin determinations are done by assay on animals and should be run every 2 weeks or oftener in the last third of pregnancy. The use of large doses of stilbestrol and progesterone seems to restore the hormone balance and save the fetus.

In addition to this upset during pregnancy, the diabetes may vary in two ways. Occasionally, there is a lowering of the renal threshold so that glycosuria occurs even with a normal blood sugar. This is no great problem if recognized, but it leads to repeated insulin shock if not. A more serious change is a rapid and marked increase in the severity of the diabetes which seems to occur about the 7th month. At this time acidosis may arise and become severe with very little rise in the blood sugar. At such time we must discard our rule for making small and infrequent changes in the insulin. The dose may need to be increased 10 or 15 units daily. Case No. 909 had a rise in insulin requirement from 28 units to 116 units 13 days later and during that time developed marked acidosis even with this rate of increase. With prompt attention the acidosis subsided, and now both mother and fetus are well. Following delivery there is often an abrupt decrease in the severity of the diabetes so that in spite of reductions of 6 units daily blood sugar values of 50 mg. were obtained in Case No. 285. The insulin dose in Case No. 505 fell from 85 units to 26 units in the 9 days after deliver.

Insulin resistance is always disturbing. To combat it one must keep in mind the main rule in insulin therapy, "The needed dose is unknown. Prescribe as best you can and check the result to see what is needed next." In the absence of an emergency one can go somewhat slowly, but larger doses

at shorter intervals are given than in the routine case. In the presence of acidosis the danger from acidosis far exceeds the danger from insulin shock and large doses of crystalline insulin, as much as 50 units or more, should be given at half hourly or hourly intervals until the patient responds and the blood sugar falls as indicated by tests made every 3 or 4 hours. I have in the hospital now one patient, Case No. 1052, who requires 315 units of insulin daily with no discoverable relevant complication. An extreme case of insulin resistance, Case No. 908, developed during the course of diabetic coma and caused me no end of trouble last January. When first seen by me, she had a blood sugar of 1008 mg. which fell to 576 mg. in 6 hours with 585 units of regular insulin. Her CO_2 was 10 vol. % and she was delirious rather than comatose. After the initial improvement and in spite of an additional 175 units of insulin she evidently became insulin resistant and her blood sugar rose to 944 mg. The insulin dose was increased till 10 hours after I first saw her she was getting 100 units of regular insulin every ½ hour. This was continued for 12 hours. At this time her blood sugar was 544 mg. and she looked as though she would die. I therefore increased the insulin to 200 units every half hour and in the next 12 hours after an additional 5000 units her blood sugar was 256 mg. and she was perfectly conscious and in excellent condition. However, the patient abruptly had a convulsion, went into shock and died, apparently not in hypoglycemia as judged by the rate of blood sugar fall, failure to respond to glucose, and a subsequent very high blood sugar not explained by glucose administration. In 24 hours this patient received 7,3000 units of insulin. Such cases as these show the difficulty of formulating rules for insulin administration. However, we can certainly get rather good results if we follow the general rule that routinely the dose of insulin outside the hospital is varied only 3 to 4 units every 3 days and that in emergencies other than hypoglycemia much larger increases are made at frequent intervals and most important of all checked by frequent tests.

Immunity To Diphtheria In Student-Nurses

J. I. WARING, M.D., CHARLESTON, S. C.

Obviously the question of immunity is important for nurses who are likely to come in contact with diphtheria. It has been routine practice to do the Schick test on classes entering the nursing school at the Medical College, and to immunize all those students who showed positive reactions. Toxin-antitoxin has been abandoned in favor of alum-precipitated diphtheria toxoid, which has been given without preliminary test and without any considerable reaction afterward. Figures for the past few years are as follows:

Year	Number Tested	Number Positive	
1937	32	4	
1938	48	8	
1939	51	9	
1940	49	6	
1941	59	8	
1942	22	3	
1943	64	8	
TOTALS	325	46	(14.15%)

The age group was 18 to 22 years, with only a few over 22 years and none over 26 years. Classes included students from all over the state, from both urban and rural districts.

Since about one in every seven nurses was susceptible to diphtheria, routine testing and immunization are worthwhile procedures.

The Journal of the South Carolina Medical Association

EDITOR: Julian P. Price ..... Florence, S. C.

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Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Original manuscripts, subject to approval by the Editor and the Editorial Board, are desired for publication in the Journal. They should be typewritten, double spaced, on 8½ x 11 paper. References should be complete, and only such as relate directly to statements quoted in the paper. Illustrations will be used as funds permit, or as authors are willing to bear the necessary increase in cost. Short original articles are preferred to long reviews.

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A PHYSICIAN'S PLEDGE

for

the New Year

At this, the beginning of a New Year, I pledge myself, with the help of the Great Physician, to devote my energies, my fortune—yea, my life, if needs be—toward the attainment and protection of those things which I hold most dear:

A baby's rosy cheeks—freedom from disease and freedom from want,

A little girl's merry laugh—freedom from fear and freedom from oppression,

A boy's questions — freedom of speech and freedom of investigation,

A woman's love—freedom of friendship and freedom to marry the choice of one's own heart,

A man's religion—freedom to worship God and to serve Him according to one's own conscience.

"KILLED IN ACTION"

A close friend of ours has just received a message from the War Department that his son has been "killed in action."

"Killed in action." We knew the boy—a tall, strapping, handsome young fellow who had entered the service of his country with a ready smile and a willingness to serve. The public schools of Florence, the Citadel, and special training in the army had made him a soldier and a man of whom any nation could be proud. The future held so much for him with his abilities, his personality, his character, and he would have been a leader in his chosen field and his community—and now he is gone.

"Killed in action." The love of a father and a mother were wrapped up in that boy. His father had served in World War One and had given his best to "make the world safe for democracy" and to "win the war to end all wars." And now his only boy is the victim of a second war. Since this lad's first cry, his mother had devoted her energies toward preparing him for adult life, for the place which he would assume in the affairs of men—and now that place will never be filled.

"Killed in action." The community in which he lived and the nation which he served had striven to afford him those advantages which make for healthy growth and development. The church, the schools, his home, his friends had all joined forces to give him the best they knew. They anticipated great things from him in the days which lie ahead—and now those days will never be lived by him amongst them.

"Killed in action." Why, we cry—in our finite wisdom—why should this young lad be the victim of men's hate and greed? What did he do that he should pay the price for the avarice and treachery of older men? Why should a young man with so much to live for be the one to go while others whose lives are well spent linger on? How can a merciful Providence allow such a thing to happen?

"Killed in action." Yes, he has gone—but not to oblivion. Somewhere "out beyond the sunset," he lives. And out there his family and his friends will be with him again some day. He lived and died that others might live—if we will but learn the lesson which his life and death have taught. The lesson that the Golden Rule and not the Rule of Greed must control the actions of men, that love and not hate must control the emotions of men, and that the Prince of Peace and not the god of war must rule the hearts of men.

"Killed in action." Yes, "but he being dead, yet speaketh." A new generation of boys and girls is on the way, he seems to say, and I gave my life to protect them today—it is your task to protect them against tomorrow. If you will do this, my life will not have been lived in vain.

ACTION BY COUNCIL

At a call meeting of the Council held in Columbia on Dec. 19, 1944, the proposed program for the expansion of the Medical College of the State of S. C. was presented in detail by Dr. T. A. Pitts, Chairman of the board of Trustees of the Medical College, and Dr. L. M. Stokes, member of the Board.

After discussion, the Council passed the following resolution, unanimously;

"Resolved, that the Council endorse in principle the Expansion Program for the Medical College, as outlined by Dr. T. A. Pitts, and that the Council offer its full support to the Board of Trustees of the Medical College in the attainment of this objective."

METHOD OF NOMINATING OFFICERS

It is profitable to see what others are doing. With this in view, we present for consideration the method used by our sister, the Medical Society of the State of North Carolina, in nominating officers for the state association.

"By-Laws — Chapter V

Section 2. The House of Delegates at its first session, shall select a Committee on Nominations, consisting of ten delegates, no two of whom shall be from the same councilor district. It shall be the duty of this committee to consult with the Fellows of the Society, and to hold one or more sessions, at which the best interests of the Society and of the profession of the State shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the names of one member for the office of President-Elect and one member for each of the other offices to be filled at the annual meeting.

Section. 4. Nothing in this article shall be construed to prevent additional nominations being made by members of the House of Delegates."

IT CURES AND IT KILLS

The sulfonamides have been a boon to mankind and have cured thousands of individuals. But the sulfonamides can also kill—as a recent happening will testify.

A small colored infant was taken to a physician's office for examination. Finding a tonsillitis and beginning otitis media in the baby, he prescribed sulfadiazene in a chocolate base—a sufficient quantity to last three or four days. The prescribed dosage was slightly less than one grain per pound per day.

Four weeks later, the infant was brought back to the physician's office with the complaint of "no strength and no appetite." One glance showed a profound anemia. (The hemoglobin was less than ten.) A transfusion was given immediately and then another—but to no avail. The infant died.

On questioning, the mother explained that the baby improved so rapidly on the medicine when it was first given that she knew it was "good for the baby," and—having the prescription refilled as necessary—continued its use for over three weeks. Full dosage of sulfadiazene for over three weeks—and the patient died.

Four mistakes were made which were responsible for this infant's death. The first two were made by the physician and were excusable. The third was made by the druggist and the fourth by the mother —and these two were inexcusable.

The physician should have told the child's mother not to have the prescription refilled — particularly since she was one who knew nothing of medicine or medical care. Secondly, he should have written "Non Rep" on the prescription, to make sure that there was no refilling of the bottle.

The druggist erred in refilling a prescription containing one of the sulfonamides without the sanction of the physician. The promiscuous sale of the sulfonamides over the counter.—and such this was—is fraught with great danger. Would that there were some agency which could enforce existing provisions prohibiting such practices.

The final mistake was made by the mother in continuing the giving of medicine concerning which she knew nothing. Self-medication or lay-medication may be a great boon to the venders of patent medicines but it teaches a practice which may—as in this instance—lead to fatal consequences.

The moral to this story for the physician is obvious. Caution patients against having sulfonamide prescriptions refilled, and write "Non Rep" on all such prescriptions.

ALUMNI ASSOCIATION BULLETIN

Miss Annabelle W. Furman, Librarian for the Medical College has asked that we publish the following;

"It has been brought to my attention that some physicians who receive the Journal have not been receiving the Bulletin published by the Alumni Association. If anyone has not received the Bulletin, please communicate with me."

DEATHS

Dr. H. E. McDowell died suddenly at his office in Spartanburg, S. C., on October 31, 1944. A graduate of Emory University (Class of 1893), he was in active practice for fifty-three years. He was a native of Spartanburg County, and was widely known and much loved in Spartanburg where he served his community for many years.

Dr. McDowell is survived by his wife, Mrs. H. E. McDowell, the former Miss Maggie Mae Haskins, three sons, five grand-children, and two great-grandchildren.

Dr. Belton Drafts Caughman, 59, died at his home in Columbia on Nov. 30th.

A graduate of the Univ. of South Carolina and of the University of Maryland School of Medicine (1911), Dr. Caughman devoted his work in Columbia to diseases of the eye, ear, nose and throat. He served for a period in the Army in World War One. For twenty years he was attending physician, without charge, to the children of Epworth Orphanage.

Dr. Caughman is survived by his widow, the former Miss Bertie Moore.

Dr. George P. Frey, 49, died suddenly at his office in Spartanburg on November 11.

Dr. Frey was graduated from the Medical College of the State of S. C. in 1930. He served on the Staff of the State Hospital in Columbia for a period and then entered general practice in Johnsonville. Two years ago he returned to his native county of Spartanburg where he worked until the time of his death.

The Ten Point Program

M. L. MEADORS, EXECUTIVE DIRECTOR AND COUNSEL

BLUE CROSS UNDER WAY

With the meeting at the Wade Hampton Hotel in Columbia on Thursday, November 30th, of the temporary directorate of the proposed Blue Cross plan, a long step was taken toward realization of the first of the objectives which our attention has been first directed under the Ten Point Program. All but six of the twenty-five members of the group were present. Such attendance and the interest exhibited was indeed gratifying. The group consists of representatives of the medical profession, hospital trustees and administrators, businessmen, farmers and clergymen. Elsewhere on this page appears a complete list of the names and the business or professional affiliation of each.

The meeting in Columbia was featured by the address of Mr. J. E. B. Stuart, Executive Vice-President of Hospital Care Corporation, Cincinnatti, Ohio, and by the full discussion of the subject, led and directed by him.

Mr. Stuart spoke from a wealth of experience in the successful operation of one of the largest Blue Cross plans now in existence. He described fully the principles of pre-payment hospital insurance under the Blue Cross plans, and those which should guide us in setting up an organization in South Carolina. The features of such plans which distinguish them from the usual contracts of commercial insurance companies were stressed, along with the essentially different methods of securing memberships and the relationships between subscribers, the organization as a unit, and the participating hospitals.

Warning signs were raised by Mr. Stuart at a number of pitfalls by which other plans have been caused serious difficulties, and we are fortunate at being in a position to profit by the experience of others, including in a large measure, the organization headed by Mr. Stuart, in working out the set-up for the plan in South Carolina.

Under the Cincinnatti plan, complete coverage has been recently instituted—the subscriber is guaranteed full hospital service (excepting only certain of the most unusual types of conditions.) Mr. Stuart expressed the opinion that possibly in one or two instances they had gone too far, but on the other hand, as he pointed out, the experience from the standpoint of utilization of certain services guaranteed under the new contract, has not proved as widespread experience as was anticipated.

It was evident from his remarks that the South Carolina—and any other new-plan, should proceed gradually, on a safe, sound basis, offering limited benefits at first, both from the standpoint of type and length of hospital service, and that these should be increased from time to time as circumstances and the condition of the reserve fund permit. Complete coverage however, should be the ultimate goal.

Mr. Stuart's complete mastery of the subject was clearly in evidence. From the beginning of his remarks he invited questions and they were not long in forthcoming. The result was a total absence of formality, and full, open discussion of any and all questions in the minds of those present. No better method could have been adopted to assure complete understanding of the principles, purpose and method of institution and operation of Blue Cross plans. There was no reasonable excuse for the departure of any member of the group without a fairly clear idea of what is in prospect.

The above being true, it is especially reassuring that practically the unanimous reaction seems to have been favorable. In fact, no unfavorable comment or criticism was heard, and the meeting was concluded in an atmosphere of complete cooperation among the several groups represented. This, needless to say, was as it should be.

The informative discussion conducted by Mr. Stuart consumed the morning session. Arrangements had been made for luncheon in one of the private dining rooms of the hotel. The first order of business, when the meeting was resumed after lunch, was the election of officers and appointment of committees for the handling of preliminary work looking toward the permanent organization. The following were chosen:

Mr. T. C. Callison, Columbia—President
Mr. J. B. Norman, Greenville—Vice-President
Mr. George A. Buchanan, Columbia—Treasurer
Mr. R. L. Moser, Columbia—Secretary

A motion was adopted that the Executive Committee consist of the President, Vice-President, Treasurer and four members elected from the directorate. Those elected to serve on the Executive Committee with the officers named were:

Mr. F. O. Bates, Charleston
Mr. R. S. Huntington, Greenville
Dr. Julian P. Price, Florence
Rev. George Lewis Smith, Aiken

At a meeting of the Executive Committe on Friday morning, December 1st, additional committees were selected as follows:

Finance: Mr. A. B. Taylor—Chairman
Legislative: Mr. George A. Buchanan—Chairman
Hospital Relations — Rev. George Lewis Smith — Chairman
Medical Relations: Dr. W. T. Brockman—Chairman
Publicity: Mr. George A. Buchanan—Chairman

Of necessity, the whole structure, from the per-

sonnel of the directorate on up, is temporary since an enabling act must be adopted by the State Legislature before the organization can have legal existence. There is every reason to believe this will be effected at the approaching session of the General Assembly, and of course, the assistance, support and activity, of many or all of those who constitute the temporary set-up is looked forward to in the permanent organization.

TEMPORARY ORGANIZATION

Believing that the information will be of interest to, and deserves the attention of all members of the South Carolina Medical Association, we present herewith a complete list of members of the proposed directorate of the temporary organization of the Blue Cross plan for South Carolina, together with their respective business or professional interests, and places of residence:

Mr. Neville Bennett, Chairman, Special Service Comm. S. C. Farm Bureau, Clio, S. C.
Mr. R. W. Arrington, President, Union Bleachery, Greenville, S. C.
Mr. F. O. Bates, Superintendent, Roper Hospital, Charleston, S. C.
Dr. W. T. Brockman, Physician, Greenville, S. C.
Mr. Geo. A. Buchanan, Editor and Publisher, Columbia Record, Columbia, S. C.
Dr. Geo. H. Bunch, Physician, Columbia, S. C.
Mr. T. C. Callison, Atty. at Law; Trustee S. C. Bapt. Hospital, Columbia, S. C.
Mr. A. C. Connelley, President, J. M. Connelley Co., Charleston, S. C.
Mr. R. L. Dougherty, Business Manager, The Orthopedic Hospital, Columbia, S. C.
Mr. J. B. K. DeLoach, Superintendent, Columbia Hospital, Columbia, S. C.
Dr. Dexter M. Evans, Physician, Lake City, S. C.
Mr. L. C. Fisher, President, Fisher Lumber Co., Charleston, S. C.
Mr. Chas. S. Gardner, Business Manager, McLeod's Infirmary, Florence, S. C.
Mr. Geo. W. Holman, Superintendent, York County Hospital, Rock Hill, S. C.
Mr. Roger S. Huntington, President, Huntington & Guerry, Chairman, Board of Governors, Greenville General Hospital, Greenville, S. C.
Dr. Kenneth M. Lynch, Dean, Medical College of S. C., Charleston, S. C.
Mr. M. L. Meadors, Executive Director and Counsel, Ten Point Program, S. C. Medical Association, Florence, S. C.
Mr. J. B. Norman, Superintendent, Greenville General Hospital, Greenville, S. C.
Dr. Julian P. Price, Physician, Florence, S. C.
Rev. J. E. Rawlinson, Pastor, First Baptist Church, Orangeburg, S. C.
Rev. Geo. Lewis Smith, Diocesan and Director, Catholic Hospitals, Charleston Diocese, Aiken, S. C.
Mr. W. W. Smoke, Editor and Publisher, Walterboro Press and Standard, Walterboro, S. C.
Mr. A. B. Taylor, President, Taylor-Colquitt Co., Spartanburg, S. C.
Rev. W. M. Whiteside, Superintendent, Baptist Hospital, Columbia, S. C.

PROGRAM INDORSED BY THE HOSPITAL ASSOCIATION

On Friday morning, December 1st, your Director was invited to discuss the Ten Point Program before the convention of the State Hospital Association, held in the ballroom of the Wade Hampton Hotel in Columbia. He followed immediately an address by Mr. J. B. Norman, Chairman of the Legislative Committee of the Hospital Association, on the Blue Cross plan. Mr. Norman has been most active in planning and in making arrangements for the preliminary organization of the Blue Cross plan.

Our remarks were devoted to full discussion of the program as a whole, each point being taken up specifically, and the matter being dealt with at length. The audience was attentive and evidenced real interest. Immediately following our remarks, Rev. W. M. Whiteside of Columbia, made a statement expressing his personal approval and desire for cooperation, and also his opinion, that the program should have the whole-hearted backing of the State Hospital Association. He expressed the view that the movement toward government control of medical practice would be followed immediately by similar control of hospitals and hospital services, that the doctors had acted wisely in taking the initiative in a positive program toward effecting the necessary changes without government control, and that they deserved full support. He made a motion that the State Hospital Association go on record as indorsing fully the Ten Point Program of the South Carolina Medical Association.

Mr. Whiteside's motion was seconded by Rev. Geo. Lewis Smith of Aiken, and by Mr. J. B. Norman, the latter emphasizing the extent of activity and value of the cooperation being received from the Medical Association in connection with the Blue Cross plan. The motion for indorsement of the program was unanimously adopted.

BLUE CROSS AND THE COMMERCIAL INSURANCE COMPANIES

Several inquiries have been received, and no doubt these will continue to arrive, as to the effect of the Blue Cross organization on the business of commercial insurance companies in the state. During recent years, many of the old line companies have recognized in hospitalization and health insurance promising fields for expansion. Many good contracts are on the market covering risks of this kind. In addition to the companies which formerly handled life insurance, principally or exclusively, and which are now operating also in other fields, a number of

smaller companies have been organized in this and other states for the purpose of specializing in health and hospital insurance. Most or many of these contracts include clauses providing for the payment of substantial sums in the event of accidental death of the policyholder. This feature however, is merely incidental to the main contract and may be compared with the double indemnity clause available with most ordinary life insurance policies.

Some concern has been evidenced by people interested in some of these insurance companies—friends and some of them members of the medical profession, and their companies sound and substantial organizations. As we see it, there is no cause for alarm or antagonism on the part of these companies, but on the contrary, there is real reason why the organization and successful operation of Blue Cross plans may well be in their interest.

Actually, the two types of business differ to such an extent that they should not be regarded as strictly competitive in the usual sense of the word. The Blue Cross plan involves certain fundamental principles which give it advantages and enable it to present an appeal to the public such as none of the commercial insurance contracts which have come to our attention have been able to achieve thus far. Especially the differences are these.

The Blue Cross plan is a non-profit organization. Its working capital does not consist of dividend-paying stock. It belongs to the members of the plan, the subscribers who pay the weekly or monthly charges for the benefits provided under the contract. The surplus accumulated, in excess of the amount necessary to repay the original working capital, is held as a reserve fund for the payment of hospital bills. When the amount of such reserve exceeds that which reasonable business judgment indicates is necessary to meet normal demands, the fund is made available, not to stockholders in the form of dividends, but to members of the plan in the way of increased benefits or reduced charges. Naturally, such a plan has greater appeal to the average citizen than one in which he realizes that a portion of his dollar paid for protection, ultimately goes to a stockholder in dividends.

The second main distinguishing feature of the Blue Cross contract is the fact that it guarantees a specific service and not simply repayment to the subscriber on an indemnity basis, in dollars and cents for the expense, or a portion of the hospital expense, he has incurred. The latter is the system generally used by the commercial insurance companies. The amount provided under the contract is paid to the policyholder, who in turn may apply it on his hospital bill.

The average subscriber to a hospitalization prepayment plan is interested, primarily, in service — the assurance that he will receive hospital care to the extent necessary and for the length of time required. That service, within limitations of the agreement, is guaranteed by the Blue Cross contract.

A third feature which distinguishes the plan is its method of dealing directly with the hospital. Most commercial insurance companies do not. For this reason some of the hospitals do not readily admit patients simply upon the strength of their being policyholders, since there is no direct contractual relationship between the hospital and the insurance company. The opposite is true under the Blue Cross plan. There, the patient is admitted on presentation of his identification card showing him to be a member in good standing of a Blue Cross plan. The services guaranteed under his contract are provided, and the hospital mails the bill directly to the office of the Plan and receives its check. As a rule, membership in any Blue Cross plan which is duly qualified and identified by the American Hospital Association is recognized by established hospitals all over the country, so that no matter where the subscriber travels, hospital service is available in accordance with and to the extent provided under the terms of his contract.

If the proposal for federal control of medicine is carried through under the Wagner-Murray-Dingle Bill, or any other comparable legislation, it will automatically dispense with any need for voluntary hospital and health insurance. Blue Cross plans will not be able to operate, and by the same token no hospital or health insurance contracts will be sold by the commercial companies. The taxpayer, who is required to pay substantial amounts for the support of a federal system of health control, the benefits of which are available to him, will not be interested in buying commercial health insurance.

It is generally conceded that the most practical way to discourage the development of federal control of medicine, is to achieve the necessary reforms or improvements in some other way and that voluntary insurance under the hospital and medical service plans offers the surest and most practical method of doing that. This being true, it appears that widespread use of the Blue Cross plan will do more than anything else to maintain the opportunity now available to the commercial companies to offer their contracts for hospital insurance on a free and open market.

FIRST DISTRICT MEETING

A meeting of the First District Medical Society was held at Walterboro, at six o'clock on the afternoon of December 7th. Despite inclement weather, the attendance was splendid and included doctors from nearly all, if not every one of the counties in the district, with a substantial representation from the city of Charleston.

The meeting was held in the dining room of the Interstate Glass House, where, following the business and scientific session, a delicious dinner was served.

Following the election of officers and transaction

of routine business, interesting scientific papers were read by Dr. B. O. Ravenel and Dr. Paul Sanders. Dr. Kenneth Lynch then discussed the plans for expansion of the Medical College, and this was followed by full discussion of the Ten Point Program by your Secretary and Director. The latter dealt specifically with the Blue Cross plan, and the steps being taken toward organization in South Carolina, while Dr. Price talked on the subject generally. Interest of those present was evident and the reaction favorable. Printed copies of the program were distributed and a request has since been received from one of the doctors in the First District for a large number of these for distribution among his patients. Incidentally, we are in position to supply any number of similar requests.

Plans are now under way for similar discussion of the program at a meeting of the Fifth District Society, at Winnsboro, on January 18th.

NEWS ITEMS

Dr. Rowland F. Zeigler of Seneca recently gave a radio talk over WFBC in Greenville on the possibilities of alien diseases in the United States.

Capt. Allen C. Bradham, formerly of Anderson, has been assigned to the 236th General Hospital Unit (Camp Barkeley, Texas) as Chief of Urology.

Announcement was made by the American College of Surgeons that the following physicians from S. C. had been received into fellowship in the College in 1944; Drs. George R. Dawson of Florence, Paul P. Hearn of Greenville, and John M. Settle of Charleston.

South Carolina was represented at the meeting of the Southern Chapter of the American College of Chest Physicians held in St. Louis, Nov. 13 and 14, by Drs. R. K. Brown of Greenville and Wm. H. Moncrief of State Park.

Capt. W. H. Powe, formerly of Greenville, has sustained an injury to his arm from the fragment of a high explosive shell.

Lt. Col. Everett Poole, formerly of Greenville, is now Executive Officer at Camp Van Dorn, Miss.

Capt. Thomas Chisholm (U. S. P. H. Service) has been appointed as acting director of Veneral Disease Control of the State Board of Health. He was graduated from Erskine and from the Medical Department of the Univ. of Tenn.

Dr. Ben F. Wyman, State Health Officer, was elected Secretary of the Section on Public Health of the Southern Medical Association.

In a recent letter relative to the Ten Point Program, Dr. W. Tertsy Lander of Williamston enclosed the following interesting account of his recent illness;

"Six months ago I had an attack of Coronary Occlusion. Fortunately, I was incidentally at the Anderson Hospital and received prompt attention from Dr. Wrenn and two of the Dr. Youngs. The excruciating pain was soon relieved. I was put on the accepted treatment of heart tonics and complete rest. When I was permitted to read, I reviewed the pathology as given by the best authorities in reach, and carefully considered the findings of my own case. I am led to consider the episode as an accident to the heart rather than a disease of it. The disease in my case (likely in others) seemed to be lack of calcium. With a satisfactory calcium level established, all intimation of heart trouble disappeared. Increasing exercise showed the heart in safe condition. This may be judged from the fact that, for a month, I have done any labor at hand. A dozen times for half an hour I have used the blacksmith sledge. In five minutes pulse returns to 72, no shortness of breath, no heart consciousness, apex beat at right place. I am still — and evermore— scrupulous about the calcium."

A colleague gave us the following letter which he had recently received from the wife of a former patient;

"hello Dr,

I will rite you a letter to fine out what the matther you have seen my insurance pappy I been look for them to been Back a long time and i haven,t got them yet so I wish you seen them on i close hope to hear from you soon
from _____"

OLIN CHAMBERLAIN WORKS WITH DISNEY ON MEDICAL FILMS

Lieutenant Colonel Olin B. Chamberlain, army medical corps, of 48 South Battery, and Walt Disney, motion picture cartoonist, are cooperating with officers of the army signal corps in making medical educational films, at the Metro-Goldwyn-Mayer studio, at Hollywood, word has been received in Charleston.

Colonel Chamberlain, who was a practicing physician in Charleston before his entrance into the service in June, 1942, has been serving as head of the army's largest neuropsychiatry department, at Bushnell General hospital, Brigham City, Utah. He is now on an assignment of about 60 days, at Hollywood, to act as technical medical adviser for the filming of the pictures.

The films will show characteristics and treatment, chiefly by means of baths, of neurotic patients. They are intended for the instruction of army medical officers, nurses and attendants and probably will not be shown to the general public.

Disney's work in these films will not resemble the comic cartoons for which is known, except that it will consist of animated pictures. His aid was asked because it will be easier to show gaits and facial expressions characteristic of neurotic patients by animated pictures than by using actors. Pictures of real patients could not be used, because this would violate their privacy.

MEDICAL SUMMARIES

B. O. RAVENEL, M.D., CHARLESTON, S. C.

PNEUMONIA IN CHILDREN

At this season of the year, pneumonia is by far the most frequent serious illness encountered in infants and children and the sooner it is diagnosed and treatment instituted, the better the prognosis.

We believe it advisable to place all types of pneumonia under two general heads:

(1) Primary Pneumonias and (2) Secondary Pneumonias.

Under the heading of primary pneumonias we can subdivide them into three groups—(a) Lobar (b) Lobular, and (c) Primary atypical pneumonia, (which will not be discussed in this paper), while we consider a secondary pneumonia under the term of bronchopneumonia.

The primary pneumonias are thought of as those which come on usually without any known predisposing cause while bronchopneumonias are secondary to some disease of the respiratory tract as measles, influenza, pertussis, scarlet fever, etc., or to some mechanical or chemical agent as kerosene which is aspirated.

Lobar pneumonia is due in practically all cases to the pneumococcus. This process is usually limited to one lobe of the lung which may become completely or partially consolidated.

In the lobular type of pneumonia which is most usually due to streptococci but may be caused by pneumococci, staphylocci or influenza bacilli, the organisms also reach the alveoli by way of the lymphatics of the interstitial tissue. Gaskell has shown experimentally that if the organisms are of low virulence, a pathcy pneumonia will result. At times this lobular distribution becomes confluent and it is difficult to determine whether the patient actually has a lobar or lobular pneumonia.

In bronchopneumonia, which according to our classification is always a secondary pneumonia, we have a definite predisposing factor which sets the stage. (i. e. an attack of measles, pertussis, scarlet fever or influenza, some chronic wasting disease, or aspiration of some foreign material). In this type, the influenza baccilus is probably the most frequent invader, but the pneumococcus, streptococcus or staphylococcus may be the causative organism. Here the process proceeds by direct extension into the alveoli rather than by the lymphatic route. The bronchi and bronchioles are damaged by the primary disease and desquamated epithelium and mucous cause blockage of many small areas with resultant scattered areas of atelectasis which in turn become infected.

In pneumonia in infants, we find frequently that the patient had been in good health and that he was suddenly taken ill, or in a large number of cases the child has a history of having had a mild upper respiratory infection for two or three days and the parents noted that he seemed to have taken much worse in a period of a few hours. The acute onset with a chill is usually not found in a small child as is seen so commonly in older children and adults. Not infrequently the little patient has one or more convulsions. He appears dull and apathetic, is quite content to lie quietly in bed, develops anorexia and within a short time, the child appears quite ill. It is about this time, if convulsions have not appeared earlier, that the doctor is usually called in. On arrival at the bedside, he finds an acutely and seriously ill child who has a rapid respiration, not infrequently with an associated expiratory grunt. The child is lethargic, has an apprehensive look on his face, and may or may not resent the physical examination. The temperature is found to be 102° to 104° (F). The skin is hot and dry and the pulse, rapid and full. Examination of the abdomen may reveal no abnormal findings or there may be a moderate amount of distension. Not infrequently, one finds one side or the other somewhat tender with definite muscle guarding. This is probably due to diaphragmatic pleurisy which may be found on examination of the chest. This sign is very frequently helpful in determining which lung is involved.

Careful inspecition of the chest occasionally affords information. If there is pleural involvement, definite splinting of the involved side may be seen and in many cases one finds lessened expansion on the side where the pathology is present. It is through auscultation that we find the earliest signs of pneumonia—a suppression of the breath sounds over the affected lobe. There may be a few, fine crepitant rales at the end of inspiration, but these are not the rule in early cases. As the process continues, the signs of consolidation become apparent and there is no difficulty in making the diagnosis. At times, it is advantageous to make an infant cry to bring out the signs of consolidation which cannot be heard when he is quiet.

On percussion in the early stages, there are no changes elicited, even though there is definite suppression of breath sounds, but as the time goes on, there is first impaired resonance over the affected side, when compared to the normal side, the dullness to flatness may appear.

In lobular and bronchopneumonia, the physical signs in the chest are indistinguishable and the only way we can differentiate these is by the clinical history, the former giving a history which reveals that the process is primary while in the latter, the history is

(Read before the First District Association, Walterboro, Dec. 21, 1944.)

of a previous infection which has set the stage for a secondary pneumonia. On auscultation in these cases, we find the lungs literally full of coarse and medium rales as are found in bronchitis but on further search, we find one or more areas on one or both sides where there are showers of fine inspiratory rales which are distinctly different from those heard throughout the rest of the chest. There may or may not be a faint suggestion of bronchial breathing in these areas, and there is no change in the percussion note. As the process continues, we are able to find definite patchy areas of consolidation and at times these areas become confluent to give the impression that there is lobar involvement rather than lobular or bronchial.

Since the advent of the sulfonamides, the treatment of the various type of bacterial pneumonias has been simplified and standardized to some extent. In the Pediatric Department of Roper Hospital, the routine orders on all patients admitted on the service with the diagnosis of pneumonia include a blood count and urinalysis; sputum for typing of pneumococci; a blood culture; X-ray of chest and either sulfathiazole or sulfadiazene which is administered in doses of 1 grain per pound body weight per day divided into 6 doses. In order to try to prevent crystallization of the drug in the kidneys, alkalinization of the urine is attempted by giving an equal quantity of sodium bicarbonate with each dose of which ever drug is used. For the pneumonia patient who is moderately ill this dosage schedule has proven to be quite satisfactory. However, if the patient appears to be seriously ill the initial dose of the sulfonamide should be given in a larger dose (i. e. one half of the calculated daily dose). If the child is vomiting or it is thought that it would be to the patient's advantage because of his critical condition, the sodium salt of the drug is given intravenously in a 5% solution.

Certain cases of pneumonia do not respond to chemotherapy with the sulfonamides and if no clinical response is seen after 24 to 36 hours of treatment it is advisable to institute therapy with penicillin. This is given in an initial dose of 20,000 units intravenously and then 10,000 units every three hours subcutaneously. The subcutaneous route is used in preference to the intramuscular route because absorption of the drug is slower and a more constant blood concentration is maintained. Penicillin is also used in those cases where a loud friction rub is heard and there is a chance that empyema may develop. If the patient appears to be in such poor condition that it seems only fair that he should have every type of treatment, penicillin is given in conjunction with the sulfonamides from the start.

During the time the sulfonamides are being administered, blood concentrations are obtained twice weekly and hemoglobin, leucocyte and differential counts are obtained when thought advisable. The urinary output is followed closely and frequent urinalyses are done with special attention being paid to the presence of red blood cells and sulfonamide crystals. We have found that in the great majority of patients, the sulfonamide or penicillin can be discontinued after forty-eight hours of normal temperature. The use of serum has practically been discontinued since the discovery of the sulfonamides and penicillin.

In addition to chemotherapy, there are several other important factors that must be considered in the treatment; namely, rest, fluid balance, diet, elimination, oxygen therapy, and other drugs which may be indicated for the comfort of the patient.

As in any disease, whether acute or chronic, rest is of prime importance. The patient should be placed in bed and not disturbed more than is absolutely necessary.

The fluid balance and diet may be considered together. Pneumonia in most cases is a disease of fairly short duration and being so, it is not necessary worry much about the amount of food that the child takes during the illness. He should be offered food he is accustomed to and likes, but under no circumstances should he be forced to take the food. As he recovers he will gradually take his diet better and by the time he recovers fully, he may have a much better appetite than he had before he was taken sick. The matter of fluids should be considered from a different angle. Due to the high fever which accompanies pneumonia, there is a greater loss of fluids than is lost under normal conditions. In addition, the patient usually vomits some especially at the onset of the disease, thereby losing more fluid and not infrequently there is diarrhea associated with the disease. Taking these facts into consideration, one can see that it is necessary to get an additional amount of fluids into these patients for if their fluid balance is not maintained, they will not respond as quickly or satisfactorily to therapy. If the patient is not vomiting, it is usually possible to get enough fluids into the child orally to maintain the fluid balance. The type of fluid makes little difference and it is easier to get the child to take fluids that he likes best whether it be water, fruit juice, soft drinks, or milk. The infant will usually take sweetened fluids better than plain and adding sugar to water increases the amount of carbohydrates which are needed to carry on the metabolic processes. A good nurse or mother can get a surprising amount of fluid into an ill patient without fighting the child. Frequent small amounts of fluids add to a large total in 24 hours. If the patient, when first seen, is showing signs of dehydration or if at any time it appears that we are unable to get sufficient fluids into the child, it is imperative that parenteral fluids be given. We have found that for intravenous use a 2.5% solution of glucose in ½ Normal Saline to be very satisfactory. This solution is entirely physiological and will not dehydrate the patient as the hypertonic 5% glucose in normal saline which is usually used, theoretically will. This solution furnishes both carbohydrates and electrolytes which are needed. For

subcutaneous use we have found the lactose ringer solution devised by Dr. Hartmann to be entirely satisfactory.

Elimination of the intestinal contents daily is desirable for the comfort of the patient and we have found that a small enema produces the desired results. A mild laxative is certainly not contraindicated but purging definitely is.

Oxygen therapy has a definite place in the treatment of pneumonia and should be used if cyanosis is present and especially if the patient is quite restless. We have found that it can be administered satisfactorily through a nasal catheter passed into the pharynx. The catheter should be changed from one nostril to the other daily and care should be taken that it is not introduced too far into the pharynx for on one or two occasions we have found the stomach distended from oxygen which was supposed to be being inhaled by the patient. In determining when oxygen therapy should be stopped it is best to cut off the supply from time to time and to observe the reactions of the patient.

For abdominal distention, which since the advent of the sulfonamides is not seen nearly as frequently, a small enema is of a great deal of aid. Another procedure which aids a great deal at times is the insertion of a rectal tube and then giving ½ c. c. of 1:4000 Prostigmin solution subcutaneously. On several occasions we have had a patient on whom both of these procedures have failed and have passed a small catheter into the stomach with the release of a large amount of gas and immediate relief from the distention.

In some cases of lobular and bronchopneumonia where the chest is filled with rales which seem to be extremely dry and the little patient has a dry cough and is quite dyspneic and frequently cyanotic, in addition to oxygen it is advisable to place the child in a croup tent. We have found that plain steam does just as much good as adding tincture of Benzoin or other medications to the water and this does away with the danger of suffocation by fumes of the medication, should the water boil out. The main thing is to increase the moisture in the air.

There are at least two drugs other than the sulfonamides which should be remembered in treating a patient with pneumonia. The first of these is codeine which is very useful in the control of pleural pain and the second is aspirin which in cases of hyperpyrexia (105° F. or higher) in the dosage of 2 grains per year is of value in reducing the fever. Tepid water or alcohol sponges when used in a proper manner may also be of value in this condition. For sedation, where there is restlessness or convulsions, phenobarbital or sodium amytal may be used.

The treatment of the most common complications should be mentioned in closing. The most common complication of pneumonia is otitis media. This condition is usually cared for adequately by the specific therapy of the pneumonia. In addition to this, non-oily nose drops may be of some value in maintaining the patency of the eustachian tubes. In very few cases do we find it necessary to incise the drums. Next in line is empyema. Early in these cases the sulfonamides are of some value but after a case of empyema is well established they should be discontinued because as in the presence of other abscesses, there is an inhibiting action. We have treated two cases of empema very successfully with penicillin in the last three months. The cavity was aspirated daily and penicillin then injected directly into the cavity. Surgical treatment should still be used when indicated. In addition to penicillin on one of the cases we are using herapin placed directly into the thorax in an effort to cut down the formation of adhesions and fibrin clots.

Percarditis is occasionally seen and here again penicillin directly into the pericardial sac is probably the treatment of choice.

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WAR BONDS

PUBLIC HEALTH NEWS

55 FEWER MATERNAL DEATHS THIS YEAR

The annual report of the Division of Maternal and Child Health shows 55 fewer maternal deaths in South Carolina in the past fiscal year than in 1943. Maternal deaths in 1943 numbered 256 as against 201 in 1944. Encouragingly, Dr. Hilla Sheriff, Director of the Division of Maternal and Child Health, declares that "more" expectant mothers in South Carolina are following clinical advice to engage an attendant at delivery." Dr. Sheriff also points out that "since medical care under the EMIC program is provided for the infant up to one year of age, it is logical to assume that mothers will take advantage of such care, thereby reducing infant morbidity and mortality rates in South Carolina."

ANNUAL MEETING SCPHA HELD TUESDAY, DECEMBER 5, IN COLUMBIA

The South Carolina Public Health Association held its annual meeting in Columbia, Tuesday, December 5, with more than 300 public health workers, representing practically every health agency in the State, present.

The meeting held in Drayton Hall, was presided over by the Association's president, Dr. G. S. T. Peeples. The invocation was delivered by the Rev. Samuel C. Cooper, pastor of the First Christian Church, Columbia, and was followed by an address of welcome by the Honorable Olin D. Johnston, Governor of South Carolina. Other speakers included Dr. Ben F. Wyman, State Health Officer; Dr. G. S. T. Peeples; Dr. J. R. Heller, Medical Director of the Venereal Disease Division of the USPHS; Dr. E. J. Gillespie, representing the director of the USPHS tuberculosis program; Mr. Terry C. Foster, Regional Director of the Vocational Rehabilitation Program; Miss Lucia Murchison, Medical Social Consultant of the State Board of Health; and Mr. J. M. Jarrett, Chief Sanitary Engineer of the North Carolina State Board of Health.

Dr. Wyman discussed the need for more modern equipment in the Bureau of Vital Statistics; the business organization of the State Board of Health; the new tuberculosis program; and the fact that the Quarantine Hospitals are a part of the Division of Venereal Disease. Dr. Wyman also assured the personnel of the county health departments that he was aware of their need of more money and congratulated them on what they had been able to accomplish with limited funds. Dr. Peeples spoke on Undulant Fever, stressing the importance of pasteurization of milk in the control of the disease and urging the enactment of a State or National law requiring pasteurization of all milk sold for public consumption. Dr. Heller discussed the Venereal Disease Problem in Wartime. Dr. Heller quoted statistics to the effect that of the men in the Army and Navy infected with venereal disease, 80 per cent of the infections come from promiscuous girls and only 20 per cent from commercial prostitutes. He said: "It is axiomatic that venereal diseases increase during wartime." Dr. Gillespie outlined the new tuberculosis program as it will be carried on by participating State Health Departments. Mr. Foster explained in detail the medical phases of the Vocational Rehabilitation Program. Miss Murchison gave an interesting talk on the Working Relationship Between the Medical Social Worker and the Public Health Nurse. Mr. Jarrett spoke on the Importance of Sanitation in a Modern Public Health Program. A motion picture titled *Modern Nutrition* was shown during the afternoon through the courtesy of E. R. Squibb & Sons.

The following officers were elected for the ensuing year: President elect, Dr. M. J. Boggs; First Vice-President, Dr. T. K. Fairey; Second Vice-President, Miss Catherine Ransey; Secretary-Treasurer, Mrs. Frank George; Councilors: Dr. L. A. Nimmons, Dr. J. L. Bryson, Mr. Max Turtletaub, Miss Ruby Wallace and Mr. C. C. Moore. Dr. Ben F. Wyman was elected to represent the SCPHA at the American Public Health Association.

SOUTH CAROLINIANA

COSGROVE, S. A. and CARTER, PATRICIA A. (Jersey City, N. J. and Charleston): A consideration of therapeutic abortion. (Am. J. Obst. & Gyn. 48:299-314, Sept., 1944)

A moral and ethical consideration of the subject. The authors believe that the fetus is a human individual and that its destruction is murder. The medical code needs more definition.

DAWSON, G. R., Jr. (Florence): A motor driven screw-holder—screw-driver. (South. Med. J. 37:587-588, Oct., 1944)

A super gadget for the orthopedic mechanic.

HUNT, S. P. (Denmark): A concept of hysteria. (South. Med. & Surg. 106:370-373, Oct., 1944)

The author believes that hysteria is a definite entity—a neurotic personality disturbance. An instance is cited at length. Psychotherapy is indicated.

JOSEY, A. I. (Columbia): Penicillin treatment of a case of tularemia without effect. (J. A. M. A. 126:-496-497, Oct. 21, 1944)

Neither penicillin nor sulfadiazine seems to hit the tularemic spot.

LASSEK, A. M. (Charleston): The role of the New York state medical schools in the national distribution of physicians. Distributional studies. II. (J. A. Am. Med. Colleges 19:352-358, Nov., 1944)

Further studies by Dr. Lassek on the question of distribution of graduates of medical schools. With the present interest in increasing the size of our (South Carolina) medical school, these data are of current concern.

LAUB, G. R. (Columbia): Acute pharyngitis due to decompensation of the circulatory system. (South. Med. J. 37:627-628, Nov., 1944)

Very early stages of unsuspected decompensation may be recognized by cyanosis and venous congestion in the pharyngeal mucosa. Cases are cited.

IBID: Septal abscess (Case report). (South. Med. & Surg. 106:374, Oct., 1944)

A rare complication of influenza, treated by drainage. Illustrated.

LOWMAN, E. W., Lt. Com. USN (MC): Planned convalescence. (U. S. Naval Med. Bull. 43-611-620, Oct., 1944)

A discussion of the utilization of a patient's idle time in planned physical and mental pursuits with a more speedy and profitable return to health as an objective.

MAGUIRE, D. L., Jr. (Charleston): Penetrating wounds of the heart. (South. Med. & Surg. 106:-411-415, Nov., 1944)

The mortality of this condition has decreased with improvement in surgical methods. Cardiac tamponade is the more serious feature and is indicated by circulatory collapse. Technique of repair is described and 2 cases treated successfully are reported.

PRATT-THOMAS, H. R. (Charleston): Aneurysm of the abdominal aorta with rupture into duodenum. (Am. J. Clin. Path. 14:405-412, July, 1944)

Report of 3 cases with details of clinical and pathological information on a rather rarely reported condition.

REMINGTON, R. E. (Charleston): The enigma of pellagra. (South. Med. J. 37:605-614, Nov., 1944)

The author proposes that some undetermined factor, rather than remedial measures, has caused the drop in incidence. Relief measures seem to have had no bearing. Various interesting hypotheses are offered.

SEIBELS, R. E. (Columbia): Effectiveness of a simple contraceptive method. (Human Fertility 9:-43-47, June, 1944)

The use of syringe and jelly or creme is acceptable to 85% of rural patients and is more than 90% effective.

TAFT, R. B. (Charleston): Radium contamination of roentgen films. (Am. J. Roent. & Radium Therapy 52:445-448, Oct., 1944)

This seems to result from the presence of small quantities of radium salts in cardboard film boxes. Tissues used to clean brushes used in painting luminous dials are discarded as waste paper which subsequently becomes cardboard.

WALTON, R. P. (Charleston): "Essentials of Pharmacology," by M. K. Geiling and others in collaboration with R. P. Walton. Chi., Univ. Chicago Bookstore, 1944, 166p.

A schematic outline intended for pharmacology teaching.

IBID: Ultimos adelantos en quimioterapia. Un comentario de los progresos fundamentales durante 1943. (Rev. Argentino-Norteamericana de ciencias med. 1:782-787, Jan., 1944)

A review of recent developments in drug therapy. Topics discussed are penicillin production, dose schedules and toxicity; the sulfonamides: sulfadiazine, sulfamerazine, sulfamethazine, sulfapyrazine and sulfacetimide; intensive treatment schedules of early syphilis and the drugs mapharsen, chlorarsen or phenarsine; air sterilization with vaporized glycols; heparin and dicoumarin; plasma and blood albumin fractions; the newer morphine substitute demerol (dolantin, pethidine).

ZIMMERMAN, S. L. and BARNETT, R. N. (Columbia): A case of probable meningococcus endocarditis apparently cured with penicillin. (South. Med. J. 37:694-696, Dec., 1944)

A case of probable subacute bacterial endocarditis, due to a meningococcus, Group I, sulfadiazine-resistant and treated satisfactorily with penicillin is reported.

The continuous intravenous drip method was used and one million units of penicillin were given over

a ten-day period, with no untoward effect.

The difficulties in differential diagnosis between endocarditis due to a meningococcus and meningococcemia are discussed, and some differential points are suggested.

MEDICAL SOCIETY NEWS

CHESTER COUNTY SOCIETY

The Chester County Medical Society held its regular monthly meeting at the home of Dr. W. R. Wallace Friday night, December 8th. Mrs. Wallace "outdid" herself in serving a delicious turkey supper with all the trimmings. Mrs. Abe Hellman, Mrs. Phelps Brooks, and Mrs. Etta Latimer served. The tables were decorated with beautiful chrysanthemums. Dr. J. N. Gaston, Jr., presided. Dr. Wallace had the following doctors as his guests:

Dr. Tom E. Brockman of Greenville, President elect of the South Carolina Medical Association, chairman of the Woman's Auxiliary Advisory Committee.

Dr. Julian Price of Florence, secretary and editor of the South Carolina Medical Journal.

Dr. George Bunch of Columbia, chairman of Committee on Medical Education.

Dr. C. S. McCants of Winnsboro.

Dr. N. B. Heyward of Columbia, chairman of Committee on Legislation and Public Policy.

Dr. Strother Pope of Columbia, chairman of Committee on Postgraduate Medical Activities.

Dr. George Dawson of Florence, member of Committee on Postwar Planning.

Dr. V. P. Patterson of Chester, president of the State Hospital Association.

Dr. D. L. Smith of Spartanburg, member of Committee on Historical Medicine.

Dr. R. M. Pollitzer of Greenville, chairman of Committee on Public Health and Instruction.

Each of these doctors made a short report of the work done by his committee. Dr. Brockman told of his trip to the recent meeting of the American Medical Association at Chicago. The doctors discussed the "Blue Cross Hospital Plan," and the "Medical Service Plan," and the new "Ten Point Program for South Carolina."

Other local and county doctors present were:

Dr. R. E. Abell
Dr. J. B. Floyd of Great Falls
Dr. J. H. Gaston, Sr. of Edgemoor
Dr. W. J. Henry
Dr. G. A. Hennies
Dr. A. M. Wylie
Dr. R. D. Hicks
Dr. J. P. Young

FIRST DISTRICT MEDICAL ASSOCIATION

With the largest crowd in attendance in recent years, the First District Medical Association held its annual meeting in Walterboro on Dec. 7.

Following a social hour, the group enjoyed a scientific session which consisted of a discussion on Pneumonia in Children by Dr. B. O. Ravenel of Charleston, a paper on Penicillin in Genitourinary diseases by Dr. Paul Sanders of Charleston, a presentation of the Medical College Expansion Program by Dr. Kenneth Lynch, Dean of the Medical College, and a joint discussion of the Ten Point Program by Mr. M. L. Meadors, Executive Director, and Dr. Julian Price, Secretary-Editor of the S. C. Medical Association.

PEE DEE MEDICAL ASSOCIATION

The ninety-sixth annual meeting of the Pee Dee Medical Association was held in Florence on Dec. 14 with Dr. D. C. Griggs of Pageland, President, in the chair. An unusually large number attended the meeting.

The scientific session consisted of a Clinico pathological Conference by Drs. Elias Faison and Paul Kimmelstiel of Charlotte, a discussion of the Ten Point Program by Mr. M. L. Meadors, Executive Director, a paper on Experimental Comparison of Certain Skin Sterilizing Agents by Dr. T. C. Bost of Charlotte, and a talk on The Expanding Field of Preventive Medicine by Dr. J. Adam Hayne of Columbia.

Officers elected for the coming year were: Dr. F. L. Carpenter, Latta, President, Dr. C. A. Kinney, Florence, Secretary-Treasurer.

COLUMBIA MEDICAL SOCIETY

Dr. L. Emmett Madden of Columbia was elected President of the Columbia Medical Society for 1945. Dr. J. F. Woods was elected Vice-president, Dr. Chapman Milling, Secretary, and Dr. W. A. Hart, Treasurer.

Drs. Hugh Wyman, Lewis Pitts, and John E. Holler were elected as delegates to the House of Delegates.

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AERO SAKOS

This business of beginning the New Year with a column reminds us of the WAC who was asked how she liked the Army. She said it wasn't so bad although she spent her days saying "Yes, Sir," and her evenings saying "No, Sir!" Her predicament was no worse than that of the Negro Minister.

It seems that this minister was "caught" kissing one of his choir girls. When he was questioned by the members of the Board of Deacons, he explained his action away by reminding them that as their minister, he was also their Shepherd. And as the minister put it, "Your Shepherd has the privilege of taking his Lambs to his bosom!" That explanation eased the situation a bit but the members decided that they would draw up a resolution covering this case. This was done and read as follows: Whereas Brother Jones has been our minister for the past twenty-five years and

Whereas Brother Jones has convinced us that he is our Shepherd and we are his lambs,

Be it resolved that Brother Jones may take his lambs to his bosom, but from now on they gotta be RAM lambs.

This ram story only bears out Strother Pope's dictum: Many a ram has run over a mountain side because he didn't see the ewe turn.

The war has certainly invaded our entire social structure as witness the occurrence in our Corner Drug store. A child went into the drug store and asked for a dimes worth of Asafetida. When the Druggist handed her the package, the child said, "Please charge this to my father." The druggist asked, "What is his name?" The child replied, "Thistleboggan." This was too much for the druggist who said, "Take it for nothing, I'm not going to spell asafetida and Thistleboggan for a dime!"

The editor of this column wishes all his readers A Very Prosperous and Happy New Year.

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BOOK REVIEWS

A TEXTBOOK OF PATHOLOGY

By Robert A. Moore
W. B. Saunders and Company, 1944

The first edition of this book enters a field replete with excellent textbooks, yet it will find a definite place of its own. Minor faults inherent in first editions will undoubtedly be corrected in later ones.

The work is complete and includes certain uncommon conditions not ordinarily included. The discussion of diseases from the standpoint of clinico-pathological correlation adds much to the value of the work.

Epecially to be commended are the chapters dealing with the cardiovascular system, trauma and vitamins.

In general, the 1291 pages of this book are filled with interesting informative material which is of more value to the general practitioner and specialists than the usual basic science textbook.

W. M. C.

FEMALE ENDOCRINOLOGY

By Jacob Hoffman, A.B., M.D.
W. B. Saunders & Company, Philadelphia, 1944

The vastness of the subject of Endocrinology makes it very difficult to compile into one volume the satisfactory appreciation of the various conditions and medications associated. This particular book is very minute in its handling of symptomology and pathology. The accepted treatments are handled in such a way as to give a variety of opinion as to possibilities. It is also a cross-section of a majority of the literature, and while not a necessary entity for the general practitioner, it is a definitely valuable reference for any medical individual.

The emphasis placed on the injudicious use of hormones is especially worthy of note, and a careful method of diagnosis is outlined for the majority of complications.

The volume is not intended to be a compend and should not be considered such in any respect.

A. L. R.

MANUAL OF MILITARY NEUROPSYCHIATRY

Harry C. Solomon and Paul I. Yakovlev
W. B. Saunders Company

This is a fat little volume which is none the less stream-lined. The list of contributors is impressive but of necessity each of the forty-nine topics has the limitations of a compend and only some of the merits of the AMA Yearbook. The index is good and the scattered bibliographies useful. Much of the experience with neuropsychiatric problems of Selective Service, military training, and combat duty is suggested rather than evaluated, probably because new problems are still emerging. The book can be valuable to the practitioner by increasing his understanding of the neuropsychiatric problems of a soldier after his discharge from the Army.

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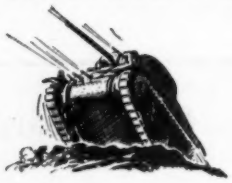

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